

AMENDMENTS TO THE CLAIMS

1-6. (cancelled)

7. (currently amended) A bone fusion implant for repair or replacement of bone comprising a hollow body with a substantially enclosed hollow region formed by ~~between~~ at least two bone fragments which are configured and dimensioned for mutual engagement and which are coupled together;

wherein the at least two bone fragments are concentric hollow cylinders.

8. (previously presented) The implant of claim 7, further comprising a core formed of at least one of bone material and bone inducing substances, the core being disposed in the hollow body.

9. (original) The implant of claim 8, wherein the core is formed of cancellous bone with a fluid concentrated therein.

10. (original) The implant of claim 9, wherein the cancellous bone is subjected to mechanical pressure to concentrate the fluid.

11. (original) The implant of claim 10, wherein the mechanical pressure is applied by aspiration.

12. (original) The implant of claim 9, wherein the fluid is concentrated by soaking.

13. (previously presented) The implant of claim 7, wherein the hollow body comprises bone tissue selected from the group consisting of autograft, allograft, xenograft bone tissue, and combinations thereof.

14. (previously presented) The implant of claim 13, wherein the bone tissue of at least one of the bone fragments is partially demineralized or demineralized.

15. (previously presented) The implant of claim 7, wherein at least one of the bone fragments is at least partially dehydrated to mate against another bone fragment.

16. (previously presented) A bone fusion implant for repair or replacement of bone comprising a hollow body formed from at least two bone fragments which are configured and dimensioned for mutual engagement and which are coupled together, wherein the hollow body further comprises a completely enclosed hollow region.
17. (previously presented) The implant of claim 16, wherein the at least two bone fragments comprise a first bone fragment with a first coupling portion and a second bone fragment with a second coupling portion, and wherein the first and second bone fragments are joined together by interfitting the first and second coupling portions.
18. (previously presented) The implant of claim 16, further comprising at least one of bone material and bone-growth inducing substance disposed in the hollow region.
19. (previously presented) The implant of claim 16, further comprising cancellous bone with a fluid concentrated therein, wherein the cancellous bone is disposed in the hollow region.
20. (previously presented) The implant of claim 16, wherein the bone tissue of at least one bone fragment is partially demineralized or demineralized.
21. (previously presented) The implant of claim 16, wherein at least one of the bone fragments is at least partially dehydrated to mate with another bone fragment.
22. (previously presented) The implant of claim 16, further comprising a region sized to receive a surgical instrument for facilitating implantation of the implant.
23. (previously presented) The implant of claim 16, further comprising an outer surface with a contour conforming in shape with the end plates of vertebrae.
24. (previously presented) The implant of claim 7, further comprising an outer surface with a contour conforming in shape with the end plates of vertebrae.

25. (previously presented) The implant of claim 7, further comprising an outer surface with a wedge-shaped profile.

26. (previously presented) The implant of claim 7, further comprising a region sized to receive a surgical instrument for facilitating implantation of the implant.

27-34. (cancelled).